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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/649,002   | 08/27/2003  | Jae-Hwan Kim         | 678-1006 (P10433)   | 5919             |
| 28249  | 7590        | 05/18/2006           | EXAMINER            |                  |
| DILWORTH & BARRESE, LLP<br>333 EARLE OVINGTON BLVD.<br>UNIONDALE, NY 11553 |             |                      | PHUONG, DAI         |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2617                |                  |

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/649,002             | KIM, JAE-HWAN       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Dai A. Phuong          | 2617                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 6 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments filed 03/16/2006 have been fully considered but they are not persuasive. Claims 1-15 are currently pending.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishiyama et al. (Pub. No: 2002/0111139).

Regarding claim 11, Nishiyama et al. disclose a method for organizing a menu in a mobile communication terminal, comprising: when a menu is registered by a user, generating a first menu plane 1201 (the screen 1201 includes 5 menu items, for example, animal information, **member registration**, zoo guide and information about stores) including at least one menu registration slot 1203 (member registration menu 1203 includes 3 submenu items, for example, name, address and phone number) associated with the registered menu 1202 (member registration item includes two submenu items, for example, registration screen and guide to special member benefits) (fig. 12, [0067]); and registering the menu to a menu registration slot 1202 of the generated menu plane 1201 (fig. 12, [0067]).

Regarding claim 12, Nishiyama et al. disclose all the limitation in claim 11. Further, Nishiyama et al. disclose the method further comprising the step of generating a second menu

plain 1202 including at least one menu registration slot (registration screen of 1202) when a menu is additionally registered by the user (fig. 12, [0067]).

Regarding claim 15, Nishiyama et al. disclose all the limitation in claim 11. Further, Nishiyama et al. disclose the method wherein the menu selection cursor positioned in said at least one user menu registration slot connected to a registered menu in the plurality of menu planes can move to another menu plane of the plurality of menu planes by selecting a key once (fig. 12, [0067]).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al. (Pub. No: 2002/0111139) in view of Matthews, III et al. (U.S. 5,724,492).

Regarding claim 14, Nishiyama et al. disclose all the limitation in claim 12. But, Nishiyama et al. do not disclose the method further comprising: displaying a moving three-dimensional image on a display unit such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane, when the menu selection cursor moves to the second menu plane.

In the same endeavor, Matthews, III et al. disclose the method further comprising: displaying a moving three-dimensional image on a display unit such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane, when the menu selection cursor moves to the second menu plane (col. 17, lines 45-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile communication terminal of Nishiyama et al. by specifically including displaying a moving three-dimensional image on a display unit such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane, when the menu selection cursor moves to the second menu plane, as taught by Matthews, III et al., the motivation being in order to conserve display space and provides contextual clues by providing a three-dimensional menu object.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (U.S. 5724492) in view of Kim et al. (Pub. No: 20010006388).

Regarding claim 1, Matthews, III et al. disclose a device for organizing a menu in a mobile communication terminal (fig. 10, col. 1, lines 61-65 and col. 17, lines 45-55), comprising: a control unit for enabling multi-dimensional navigation between the generated menu planes (col. 20, lines 37-48); and a display unit 155 for receiving the menu planes from the control unit and displaying the received menu planes under control of the control unit (col. 20, lines 37-48).

However, Matthews, III et al. do not disclose a device for organizing a menu in a mobile communication terminal, comprising: a control unit for dynamically generating and deleting a

plurality of menu planes according to a user's setting, each plane including at least one menu item.

In the same field of endeavor, Kim et al. disclose a device for organizing a menu in a mobile communication terminal, comprising: a control unit for dynamically generating and deleting a plurality of menu planes according to a user's setting ([00052]), each plane including at least one menu item ([0007] to [0008]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handheld computer by Matthews, III et al. specifically including a control unit for dynamically generating and deleting a plurality of menu planes according to a user's setting, each plane including at least one menu item, as taught by Kim et al., the motivation being in order to easy access to a desired menu item without going through many steps of menus for using the desired menu item.

Regarding claim 2, the combination of Matthews, III et al. and Kim et al. disclose all the limitation in claim 1. Further, Kim et al. disclose the device wherein a user can add at least one menu item ([0052])

Regarding claim 3, the combination of Matthews, III et al. and Kim et al. disclose all the limitation in claim 1. Further, Kim et al. disclose the device wherein a user can delete said at least one menu item ([0052]).

Regarding claim 4, the combination of Matthews, III et al. and Kim et al. disclose all the limitation in claim 1. Further, Matthews, III et al. disclose the device wherein if the number of

menu items on one of the plurality of menu planes exceeds a maximum allowable number of menu items, the control unit generates a new menu plane (col. 18, lines 2-8).

7. Claims 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (U.S. 5724492) in view of Kim et al. (Pub. No: 20010006388) and further in view of Nishiyama et al. (Pub. No: 2002/0111139).

Regarding claim 5, the combination of Matthews, III et al. and Kim et al. disclose all the limitation in claim 1. However, the combination of Matthews, III et al. and Kim et al. do not disclose wherein when a user registers a menu, the control unit generates a plurality of menu planes including at least one user menu registration slot connected to the registered menu, and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes.

In the same field of endeavor, Nishiyama et al. disclose wherein when a user registers a menu, the control unit generates a plurality of *menu planes* (screen 1201 comprises 5 menu planes, for example, animal information, member registration, zoo guide and information about stores) including at least one user menu registration slot (screen 1202) connected to the registered menu (1203), and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes (fig. 11 and fig. 12, [0067]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the handheld computer by the combination of Matthews, III et al. and Kim et al. specifically including a user registers a menu, the control unit generates a plurality of menu planes including at least one user menu registration slot connected to the registered menu, and, if a menu selection cursor moves from at least one user menu registration slot in a first menu plane of the plurality of menu planes so as to exit the first menu plane, the control unit moves the menu selection cursor to a second menu plane of the plurality of menu planes, as taught by Nishiyama et al., the motivation being in order to provide guide information that allows anyone to easily access information.

Regarding claim 7, the combination of Matthews, III et al. and Kim et al. and Nishiyama et al. disclose all the limitation in claim 5. Further, Nishiyama et al. disclose the device wherein each menu registration slot in the plurality of menu planes is spatially continuous with and connected to a menu registration slot in its neighboring menu plane (fig. 11 and fig. 12, [0067]).

Regarding claim 8, the combination of Matthews, III et al. and Kim et al. and Nishiyama et al. disclose all the limitation in claim 7. Further, Nishiyama et al. disclose the device wherein when the menu selection cursor positioned in one of the menu registration slot is moved by the user, the control unit moves the menu selection cursor to a menu registration slot in a menu plane adjacent to the menu registration slot (fig. 11 and fig. 12, [0067]).

Regarding claim 9, the combination of Matthews, III et al. and Kim et al. and Nishiyama et al. disclose all the limitation in claim 5. Further, Nishiyama et al. disclose the device wherein selecting a key once moves the menu selection cursor positioned in said at least one user menu



registration slot connected to the registered menu in the plurality of menu planes to another menu plane of the plurality of menu planes (fig. 11 and fig. 12, [0067]).

Regarding claim 10, the combination of Matthews, III et al. and Kim et al. and Nishiyama et al. disclose all the limitation in claim 5. Further, Nishiyama et al. disclose the device wherein when the menu selection cursor moves to the second menu plane, the control unit causes the display unit to display a moving three-dimensional image such that a polyhedron including the first and second menu planes is rotated to change its front view from one menu plane to another menu plane (col. 17, lines 45-62).

***Reasons Subject Matter***

8. Claims 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, the prior art record does not disclose nor fairly suggest the device wherein when there is an empty menu registration slot in the new menu plane, **the control unit enables the empty menu item slot to inherit a menu item of a menu registration slot in a previous menu plane, the menu registration slot of the previous menu plane corresponding to the empty menu item slot, and the control unit enables the display unit to display the inherited menu item on the empty menu item slot.**

Regarding claim 13, the prior art record does not disclose nor fairly suggest the method further comprising the step of: if a menu selection cursor moves from said at least one menu registration slot so as to exit the first menu plane of the plurality of menu planes, displaying the

second menu plane of the plurality of menu planes; and **if there is an empty menu registration slot in the second menu plane, enabling the empty menu item slot to inherit a menu item of a menu registration slot in the first menu plane corresponding to the empty menu item slot, and displaying the inherited menu item on the empty menu slot.**

### *Response to Argument*

9. Applicant, on page 3, second paragraph of his response, argues that the Examiner equates the first menu plane, which is generated when a menu is registered by the user, as recited by claim 1, with screen 1201 of Nishiyama. However, the Examiner disagrees. The Applicant should be noted that claim 1 is rejected under Mathews and Kim, not Nishiyama.

Applicant, on page 4, first and second paragraph of his response, argues the Examiner equates the recitation of ***“registering a menu”*** as recited claim 11, with ***“member registration”*** menu option as taught by Nishiyama is incorrect. However, the Examiner disagrees. Nishiyama discloses that when a menu is registered by a user, generating a first menu plane (1201) that includes a registration slot (1203) associated with the registered menu. The applicant’s attention is directed to the disclosure of the reference Nishiyama et al., in figure. 12, column 67. Since the claim does not clearly recite. Then, Nishiyama reads on the claimed limitations with the broadest reasonable interpretation.

Applicant, on page 4, third paragraph of his response, argues that there is improperly combination of Mathews and Kim. However, the Examiner disagrees. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to

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produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Matthews discloses multiple menus are presented in a three-dimensional structure that contains one panel for each menu. Each panel is connected to another to form the three-dimensional object. In the other hand, Kim discloses a method for managing menu functions in a mobile station. For that reason, the examiner contends that Matthews is properly combined with Kim.

### Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2617

Date: 05-11-2006



ELISEO RAMOS-FELICIANO  
PRIMARY EXAMINER